

DES INV 25

Project 2 - 1A Assignment

Group 8: Milan Filo, Marisa Kuberra, Sylvia Gao

Part 1: Audience and Interview Script

Audience

Given that education has been moved to an online format, it can be difficult for the youngest of students to adapt to remote education. We recognize that due to COVID-19, it is especially difficult to stay focused and engaged when participating in online, remote learning. Often, young children are unfocused and do not pay attention as remote learning is not interactive enough in comparison to a physical classroom. Furthermore, teachers and parents face challenges as well; for example, teachers are limited to digital tools that are not exactly the most captivating for classroom activities and parents that work from home need to keep reminding their children to stay engaged, thereby distracting them from their own work. The audience that we chose for our project is a unique one as it encompasses more than one type of person (different professions, ages, genders, locations, languages, etc); however, all of these people are somehow related to a single environment and problem. Initially, we will be able to interview multiple people that are tied to this environment, and as the project progresses, we will focus on a solution that is more user specific. Therefore, we would like to focus on online learning environments, in particular **online pre-school/elementary school classrooms**, which will be our selected “audience” (it is almost as if we are perceiving our target audience to be a “space” with associated “stakeholders”). We would like to investigate how online learning platforms are used in the aforementioned environments, how we can improve upon existing digital platforms and their flaws so that learning can be effective and engaging, and explore the role of parents, young students, and teachers in online learning so that classrooms are engaging.

Interview Script

Due to the nature of our target audience, we developed general and specific types of questions depending on who we are interviewing (child, teacher, or parent). Oftentimes, parents hire babysitters and supervisors (usually college students) or have family members help their children with their online education. For this reason, we will ask them the same kind of questions as if we were interviewing a parent.

Parent:

- How has shelter in place impacted your work? Are you able to work from home or is your presence required at your workplace? If you are not present at home during working hours, how are you able to supervise your child if they are learning from home?

- In what ways have you had to change your daily routine/schedule either because of your work or your child's routine?
- What do you think of the fact that your child is learning remotely? Do you find that they are learning in the same capacity that they would have if classes were in person?
- What digital tools and platforms do you use while sheltering in place related to your work? When and how often do you use them?
- What digital tools and platforms do you use while sheltering in place related to your child's education? When and how often does your child use them?
- What is your child's usual daily routine/schedule? Do they have frequent breaks between lessons?
- If your child learns remotely, can you describe to me from the moment you wake up how you prepare your child for class?
- Do you feel like your child loses interest during class? If so, do they need to be reminded to pay attention?
- Are there any features of online learning that you like/dislike? What features of your child's online learning platform do you find useful?

Teacher

- How has shelter in place impacted your work? Do you teach from home? If so how do you balance your home life and work life?
- In what ways have you had to change your daily routine/schedule?
- What has it been like adjusting to new teaching environments? In what ways have you had to change the way you teach your students?
- What digital tools and platforms do you use while sheltering in place in order to participate in delivering online learning? When and how often do you use them?
- Are there any differences between now and your school's transition to online learning? How smooth was this transition and what resources were you given for teaching by your school?
- Tell me about a frustrating moment of WFH.
- Do you think that it is more difficult to teach online? Have you implemented any methods to ensure that your students are engaged even online?
- How do you create teaching plans to engage your student?
- How do you ensure that all students are actively participating in class? If a student is not listening, what do you do? Do you usually contact parents on the same day?
- Please tell me more about children's performance/engagement in an online class and compare this with an in-person class.
- Describe a challenge that you have faced in an online classroom recently.
- What aspects of the digital tools that you use to deliver online learning do you find frustrating? Which ones do you find particularly useful that are not available to you in a

physical learning environment and vice versa? What improvements would you implement?

Child

- During a school day, what are you most excited for? Is school on the list?
- What does your daily routine look like? What are you limited to in terms of your daily activities? Do you usually move around your home or do you stay in one room?
- What does your teacher use to teach you? Do you use Zoom? How do you feel about it?
- What do you usually do in class?
- How long do you usually use Zoom for? Does your teacher give you breaks?
- What do you like about Zoom? Are there any particular activities that you like doing? For example, do you like seeing all your classmates at once? Do you like being in break-out rooms?
- When you compare Zoom to physical learning, what do you miss?
- Do you usually find yourself playing around with the Zoom settings when your parent is not around? Do you intentionally turn off the camera and microphone to avoid participating in class?
- Do you usually lose interest during class? Are there certain activities during which you find yourself bored?
- Does the teacher remind you often to pay attention? If yes, what else catches your attention?
- What feature of your online learning do you like? What do you dislike?
- What would you like to do on Zoom that you can't do now?

Part 2: Group Charter

Where we will keep all of our work

We will store all of our work on a shared Google Drive.

How long group members have to respond to messages

Due to the nature of living in different time zones, it is quite difficult to react promptly to received messages. For this reason, it is only natural for there to be a delay in response time as each group member has a different schedule. We have decided that we will respond within a 24 hour time frame from when the message was sent.

Availability

Due to our group's circumstances, we will prioritize working asynchronously. However, we will set a weekly meeting time, either 1-2x a week, during which we will discuss team deliverables and action items. We have used the following link to determine potential meeting times:

<https://lettucomet.com/l/DoXV4>.

Here are the times during which we are all available:

MON: 8AM-1PM CET

WED: 11:30AM-2PM CET

TUE, THU: 2PM- 5PM CET

FRI, SAT, SUN: 9AM-11AM CET

Methods of communication

We will mostly communicate through Facebook messenger due to its convenience.

Deadline responsibility and task assignment

We will set action items and task assignments during our weekly meeting using a democratic approach. That is, members can choose which tasks they prefer/want to work on.

Identification of strengths / interests

Name	Strengths & Interests
Milan Filo	Creating designs and layouts (Adobe Photoshop, Illustrator, InDesign), typography, computer graphics, prior experience with outreach and interviewing, computer graphics (creating objects and models in Maya).
Marisa Kubera	Adobe Indesign (layouts), Illustrator

	(illustrations), Photoshop, Figma, UI, writing/content creation, editing.
Wenheng Gao	Adobe (PS AI),draft(product draft or drawing),User interface, layout and design.

Guidelines and enforcement

- Try to complete all assignments 24 hours before the class so that the team has the time to review and make any necessary changes.
- Watch the lecture asynchronously on either Thursday or Friday so that over the weekend we can focus on completing assignments and working on deliverables.
- If you cannot watch asynchronously before the end of the week, make sure to notify your teammates.
- Always respect other team members' time.
- Communication is key. Try to be as responsive as possible.
- Work collaboratively and do not hesitate to ask questions. If you are struggling with something, ask for help.
- If any conflict arises, we will attempt to resolve it internally. If the problem persists, we will try to contact the instructor and course coordinator in order to help us resolve the issue and move forward.

I hereby acknowledge that I have read, understand and agree with the guidelines of the charter.

Signatories: Marisa Kuberra

Sylvia Gao

Milan Filo

Milan Filo
DES INV 25
Project 2 Assignment 1B - INDIVIDUAL

Interview 1: Family member

How has shelter in place impacted your work? Are you able to work from home or is your presence required at your workplace? If you are not present at home during working hours, how are you able to supervise your child if they are learning from home?

- Parents are required to have the responsibility of teachers. Before, they would only drop off kids at school. Now they are also responsible for the child's learning. If parents are not available, oftentimes family members are expected to help supervise their children
- Expected by parents to help with children
- Impacted work work (e.g. had to supervise the child); need to devote extra time aside from work because of the attention that had to be given to the child

In what ways have you had to change your daily routine/schedule either because of your work or the child's routine?

- Oftentimes, the child had to be prioritized over work and as such a person had to find ways to spread out their work.
- Had to work overtime in order to balance child supervision during online learning

What do you think of the fact that your child is learning remotely? Do you find that they are learning in the same capacity that they would have if classes were in person?

- Teachers were not prepared and neither were parents.
- Not learning in the same capacity. Lacking motivation, diligence, and respect towards teacher (in comparison to in-person learning)
- At home, it's difficult to motivate children due to the home environment; draining for parents as they now have more responsibilities. The younger the children are, the more difficult it is to work with them.
- Online learning cannot substitute in person learning. For example: socializing in person, asking for help is easier at school, in-person attention is more "natural"

What digital tools and platforms do you use while sheltering in place related to your work? When and how often do you use them?

- No change because the nature of your work did not change. However, exposed to Zoom when person started babysit.

What digital tools and platforms do you use while sheltering in place related to the child's education? When and how often does the child use them?

- Zoom, e-mail
- Preparation for class, homeworks, finding online resources (audio books, youtube songs etc.)

- 3 x a day (30-45 min), everyday Mon-Fri

What is the child's usual daily routine/schedule? Do they have frequent breaks between lessons?

- School started at 8:30 (first session), 10:30 (second session), 12:00 (third session). Breaks in between sessions, during which the child would usually play. After the third session, would usually help with homework, preparation for next day's activities, etc.

If the child learns remotely, can you describe to me from the moment you wake up how you prepare the child for class?

- Child was usually handed over 15 minutes before class started; did not know if child had breakfast (sometimes)
- Would turn on Zoom (quite easy to navigate); sometimes problems with sound or video, fixed it immediately; tried to be "invisible" in the background and help the child if it didn't understand something; child was not focused, easily distracted which is understandable considering that online learning is unusual for the child at such a young age; not immersive
- Screen time was too long: looking at the screen is difficult when compared to being in person
- Always had to be there (without her would, child would not be able to focus)

Do you feel like your child loses interest during class? If so, do they need to be reminded to pay attention?

- Yes. Child was spinning on the chair, daydreaming, drawing things not related to in-class activities
- Wanted to play on the iPad
- Had to remind the child with gestures to be quiet
- Children would mute themselves and put off video; cannot expect a 5 year old child to be independent.

Are there any features of online learning that you like/dislike? What features of your child's online learning platform do you find useful?

- Activities were not immersive enough
- Teacher was not being able to look at all children at the same time (gallery mode)
- Noticed that other children were distracted too; teacher tried as well to call out children (did it so many times) → spent too much time correcting the children instead of focusing on planned school activities; children would pay attention for a while and then lose interest
- Quite liked screen sharing but was not familiar with all of Zoom's functions
- Benefits of Zoom: parent meetings

Are there any features that you would like to see implemented?

- Does not think Zoom is a good platform for small children to participate in learning. Thinks that online learning did not benefit children.
- "Zoom is a nightmare for parents."
- Zoom did not bring joy, found the child to be behind in terms of learning (e.g. English language).
- Children are now back at school and thinks that child's education is progressing much better

Interview 2 - College student babysitter

How has shelter in place impacted your work? Are you able to work from home or is your presence required at your workplace?

- Shelter in place has impacted how much she works. As a college student, there are more open positions for full time tutors/zoom administrators + babysitting since parents need people to supervise their children.

In what ways have you had to change your daily routine/schedule either because of your work or the child's routine?

- Parents are able to focus more on their work, offices are open.
- In the family she works for, one parent has a home office → fully able to devote time to work in another part of the house instead of having to always devote time to children.

What do you think of the fact that children are learning remotely? Do you find that they are learning in the same capacity that they would have if classes were in person?

- Definitely not learning in the same capacity; perhaps a difference in terms of age as she has one 4th grader and one 2nd grader to take care of
- Think that there is barely any homework to keep children occupied
- Children are dependent on things like YouTube in their free time - only want to do that
- Hard to find activities to occupy their time
- Parents have workbooks in order to track their children's progress
- Oftentimes, children are very bored; day is not filled up and so much of the day that is open

What digital tools and platforms do you use while sheltering in place related to the child's education? When and how often does the child use them?

- Both children use Zoom
- Slide deck (See Saw): one slide deck uploaded by teacher every day on an online platform, gives an outline regarding what the day is gonna look like, used to turn in work (voice recording, video, drawing a picture)
- Clever portal (hub, bunch of links to other learning tools)
 - Typing.com
 - Math program: prodigy and zern
 - Youtube resources used by teachers
 - Raz-Kids: used for learning, fluency reading
- Short tasks: 10 min typing.com, 10 min independent reading, etc
- For 4th grader use mainly, Google classroom/drive: lists of things, keep track of work

What is the child's usual daily routine/schedule? Do they have frequent breaks between lessons?

- Contact hours: 8:30-9:15 whole class meeting (math challenge, word of the day, attendance), split up into math groups (5 kids in group, each group takes a turn, other groups have free time) , 10:20-10:45 (reading group)
- Reading video (instructional video uploaded by teacher), reading homework
- Math video, math homework
- Spelling video, spelling homework
- Writing video (random from youtube), writing homework
- Rest of the day is asynchronous, breaks between
- Thinks that schedule set by teacher at the start of the day is unrealistic)

If the child learns remotely, can you describe to me from the moment you come to work how you prepare the child for class?

- 8:30 parent has them logging in, babysitter takes over
- Younger child is more squirmy and restless, pays less attention, asks questions before sharing them
- Babysitter makes sure the child is paying attention, simultaneously does her own work but has to be supervising the child
- Help log on to assignments

Do you feel like the child loses interest during class? If so, do they need to be reminded to pay attention?

- Yes, 100%. Attention deficit plays into it; frustrated during class
- “It is quite difficult for children to pay attention especially with any learning disability”
- Not engaged at all, rarely seen fully engaged (maybe if the teacher is playing some sort of game)
- In large meetings, teacher doesn’t really call people out; in smaller groups teacher has more control and call children out
- Child plays around with Zoom settings
- Random running around the room in desperation

Are there any features of online learning that you like/dislike? What features of the child’s online learning platform do you find useful?

- Likes tools such as math games (visualization, active learning)
- Thinks there is too much screen time
- Kids dislike online learning, but they do like games like typing.com
- Not much accountability for doing the homework, kids falling behind
 - Teachers check if student logs-in + math packets but don’t check composition notebooks
 - “It’s easy for students to skate by”
- When teacher assigns assignment on Youtube, child is distracted by other videos; maybe if it was on another platform
- Overall, children tend to be quite distracted by the internet (could be perhaps locked during school hours)
- Love the computer; they are used to doing other things on it that are more fun than online learning

INTERVIEW NOTES(Project 2 1B)

The 1st audience(An Primary school teacher in Sichuan, China)

How has shelter in place impacted your work? Do you teach from home? If so how do you balance your home life and work life?

She attended classes at home for the whole semester last semester, and the classroom effect was obviously not as good as offline. On the contrary, living and working can be better balanced at home. Save the time to travel back and forth, and feel much more relaxed.

In what ways have you had to change your daily routine/schedule?

Basically did not change the daily work schedule. This may be related to the lifestyle of college teachers.

What has it been like adjusting to new teaching environments? In what ways have you had to change the way you teach your students?

The biggest problem of online teaching is that it is difficult to complete classroom discussion and there is almost no in-depth interaction; The quality of group work is degraded because students are scattered everywhere. This leads teachers to become single talk shows in class, and the pressure is greater than online.

What digital tools and platforms do you use while sheltering in place in order to participate in delivering online learning? When and how often do you use them?

She have used Tencent Conference, WeChat Group, Tintin Classroom, zoom Classroom and other new online teaching platforms before and after, forcing herself to learn and adapt to new technical means. The spring semester of 2020 is twice a week

Are there any differences between now and your school's transition to online learning? How smooth was this transition and what resources were you given for teaching by your school?

The school (In Chengdu, China) has been online since the fall semester of September, 2020, and the transition is very smooth without any problems. The school does not provide special resources from offline to online.

Tell me about a frustrating moment of WFH.

no particularly depressed.

Do you think that it is more difficult to teach online? Have you implemented any methods to ensure that your students are engaged even online?

Online teaching is definitely more difficult than offline teaching. She try her best to ensure that students can participate in interactive contents such as case analysis and opinion criticism in each course. However, because it is impossible for many people to talk online at the same time, they can only speak one voice at a time, which leads to the decrease of argumentative and speculative.

How do you create teaching plans to engage your student?

More group work and personal meeting time would definitely help.

How do you ensure that all students are actively participating in class? If a student is not listening, what do you do? Do you usually contact parents the next day?

It is impossible to ensure that all students actively participate in the classroom; We can't find out if the students are listening carefully. Parents will be asked to supervise students Please tell me the children's performance (engagement) in online class and the comparison with in-person class.

Online classes will be much more active and enthusiastic.

Describe a challenge you have faced in online classroom/ teaching recently.

The first is the technical challenge; Secondly, the teaching effect is difficult to guarantee.

What aspects of the digital tools that you use to deliver online learning do you find frustrating? Which ones do you find particularly useful that are not available to you in a physical learning environment and vice versa? What improvements would you implement?

The biggest problem is that there are occasional network failures, and it is also a problem that many people can't talk online. She think it is a good tool to modify by many people like Tencent documents or google doc.

The 2rd audience (An Primary school teacher who in Beijing, China)

How has shelter in place impacted your work? Do you teach from home? If so how do you balance your home life and work life?

He feel quite good, so he don't have to hold many useless meetings, and the efficiency is naturally improved. The only disadvantage is that it is difficult to carry out collective activities, such as surprise quiz in class. Not at present, but last semester. This is a difficult question to answer. In short, the online teaching method can better integrate family life and work. After all, the working environment is the family environment.

In what ways have you had to change your daily routine/schedule?

Don't need to make major changes, even more convenient, and don't need to spend time commuting.

What has it been like adjusting to new teaching environments? In what ways have you had to change the way you teach your students?

Online classes are really unaccustomed at first because of the lack of traditional face-to-face communication. He have to gradually force himself to be more natural when talking with the camera. This may be a bad thing, because classroom efficiency, that is, the degree to which students accept classroom content, is gradually ignored.

What digital tools and platforms do you use while sheltering in place in order to participate in delivering online learning? When and how often do you use them?

Zoom is the most commonly used one, which is necessary in class every day.

Are there any differences between now and your school's transition to online learning? How smooth was this transition and what resources were you given for teaching by your school?

In the initial stage of online teaching, the effect is not ideal. There are big and even serious loopholes in students' homework, attendance rate and teachers' preparation for lessons. However, with the continuous updating and improvement of online teaching mechanism, the teaching progress can basically be guaranteed.

Tell me about a frustrating moment of WFH.

"I think we should ask students about this question. As a teacher, online teaching is definitely easier, but students may not. At least for me, there is no such depression."

Do you think that it is more difficult to teach online? Have you implemented any methods to ensure that your students are engaged even online?

He thinks that online teaching, at least for me, is easier. Thanks to the students' good self-consciousness, he didn't take any measures other than signing in to ensure the students' attendance.

How do you create teaching plans to engage your student?

The teaching plan is made by the school.

How do you ensure that all students are actively participating in class? If a student is not listening, what do you do? Do you usually contact parents the next day?

He will not force all students to be active in class and think that college education is their own choice, and they will not appreciate this behavior, but he will not impose interference. But truancy is definitely another matter.

Please tell me the children's performance (engagement) in online class and the comparison with in-person class.

The disadvantage of online classroom is that I can't get the timely and real classroom feedback in physics class face to face, so that I may not properly estimate students' acceptance in the teaching process.

Describe a challenge you have faced in online classroom/ teaching recently.

No Challenge.

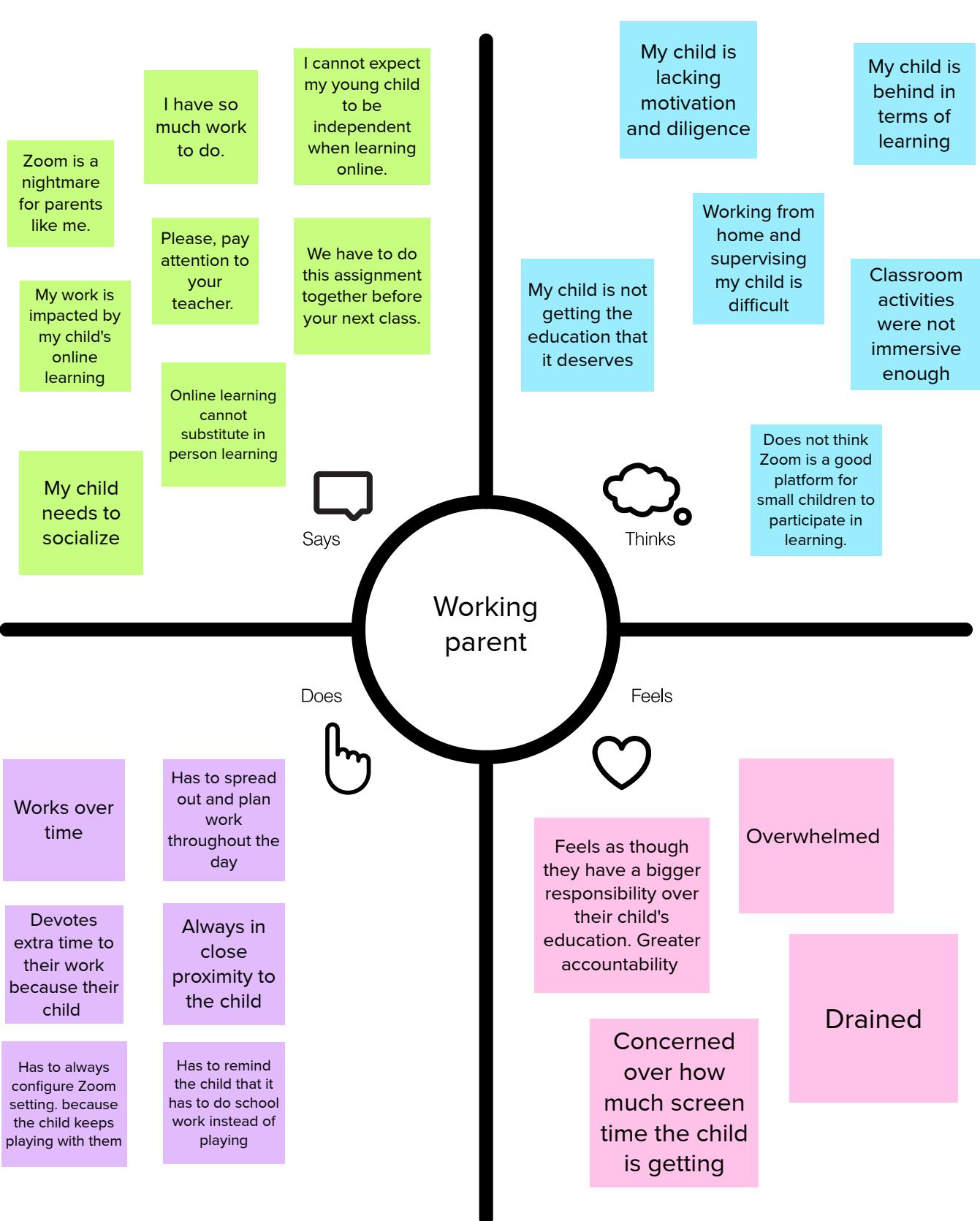
What aspects of the digital tools that you use to deliver online learning do you find frustrating? Which ones do you find particularly useful that are not available to you in a physical learning environment and vice versa? What improvements would you implement?

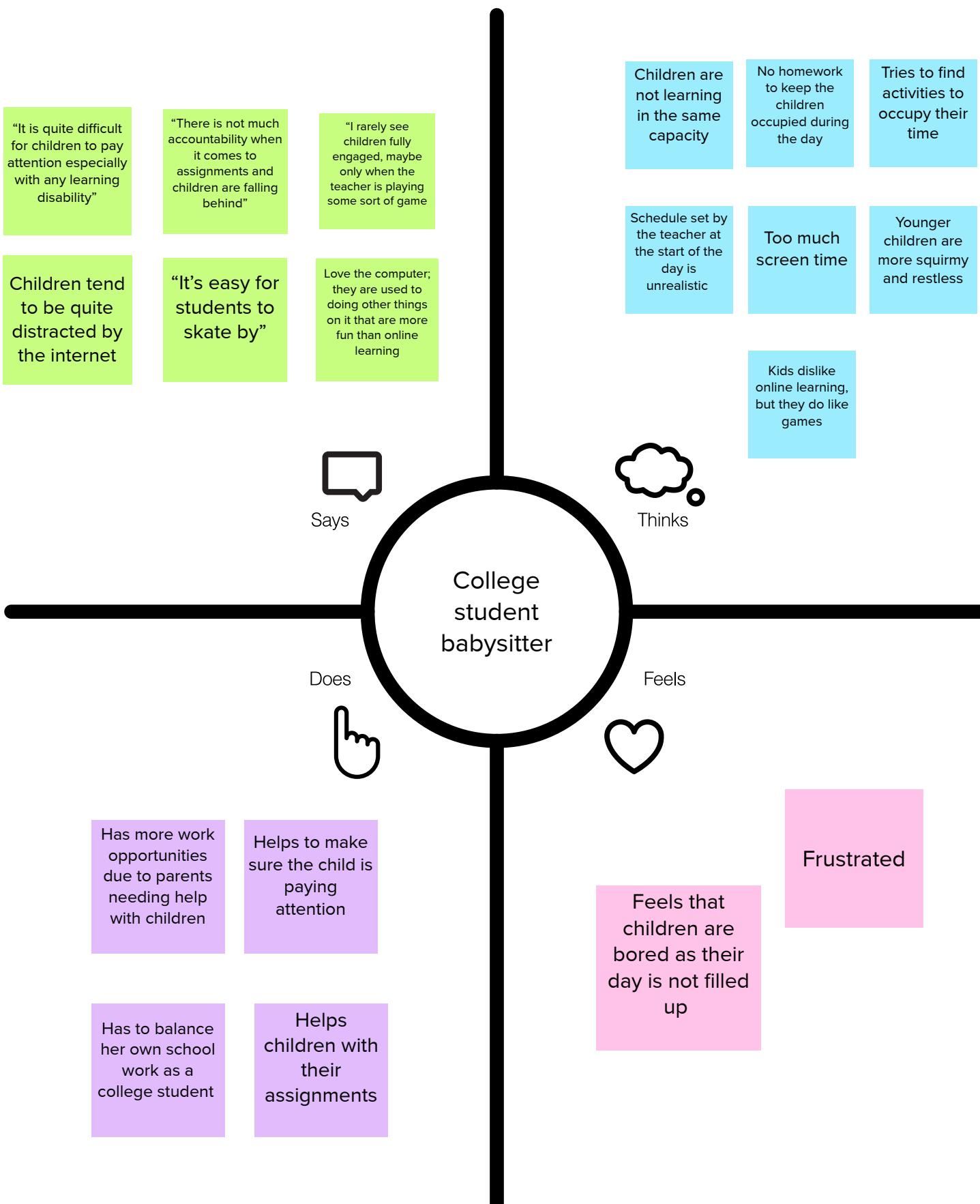
"I think the biggest problem is the possible unfairness of online learning software. I think the school has spare no effort to develop a set of online teaching platform by itself, and disable all the virtual functions, such as virtual background, voice changer, virtual camera, etc., which have seriously threatened academic integrity, which is not allowed in physics learning environment. However, I think some unnecessary group activities can adopt online mode, which can save a lot of time."

Project 2 - Individual Empathy Maps

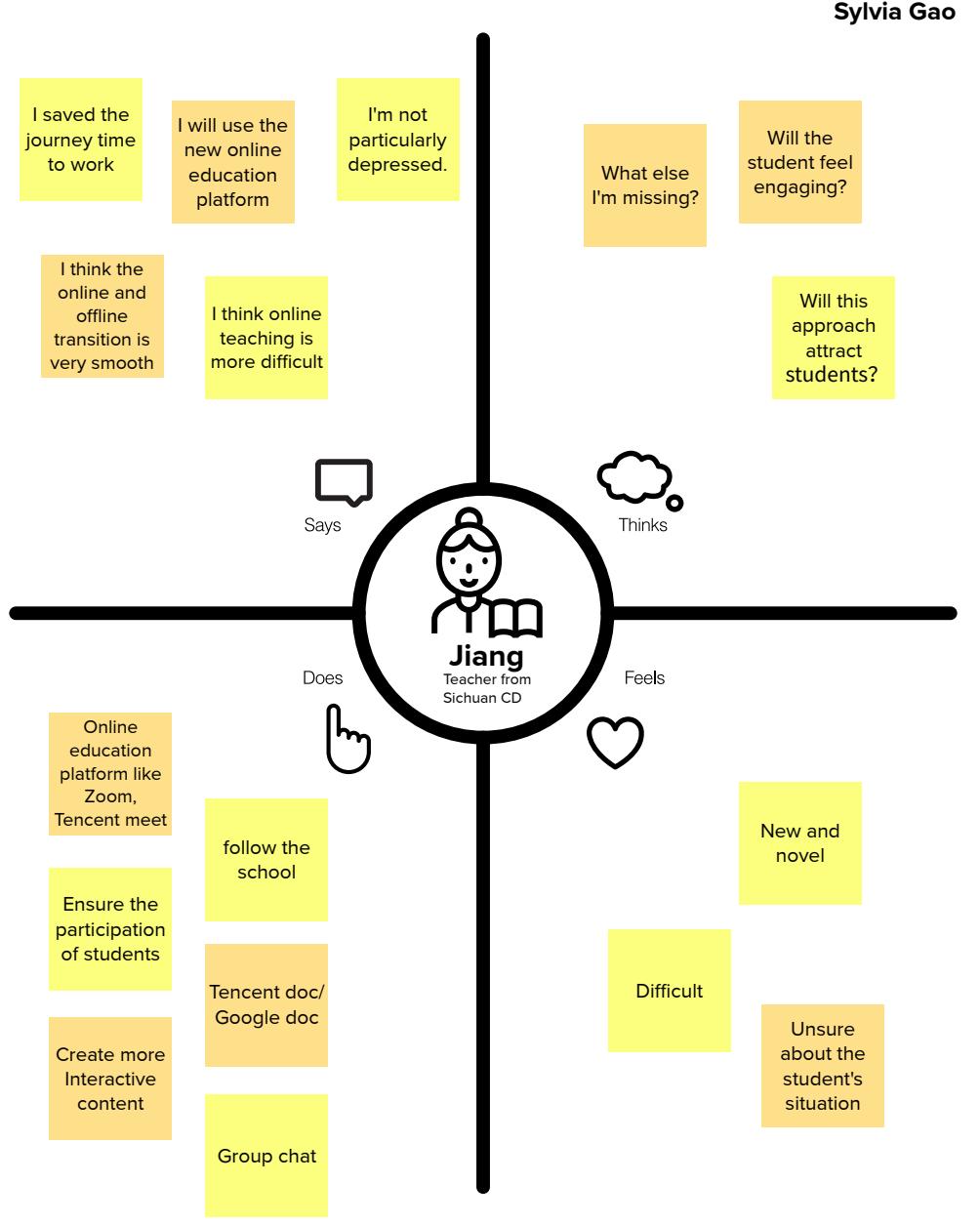
Milan Filo

Working parent, college student babysitter

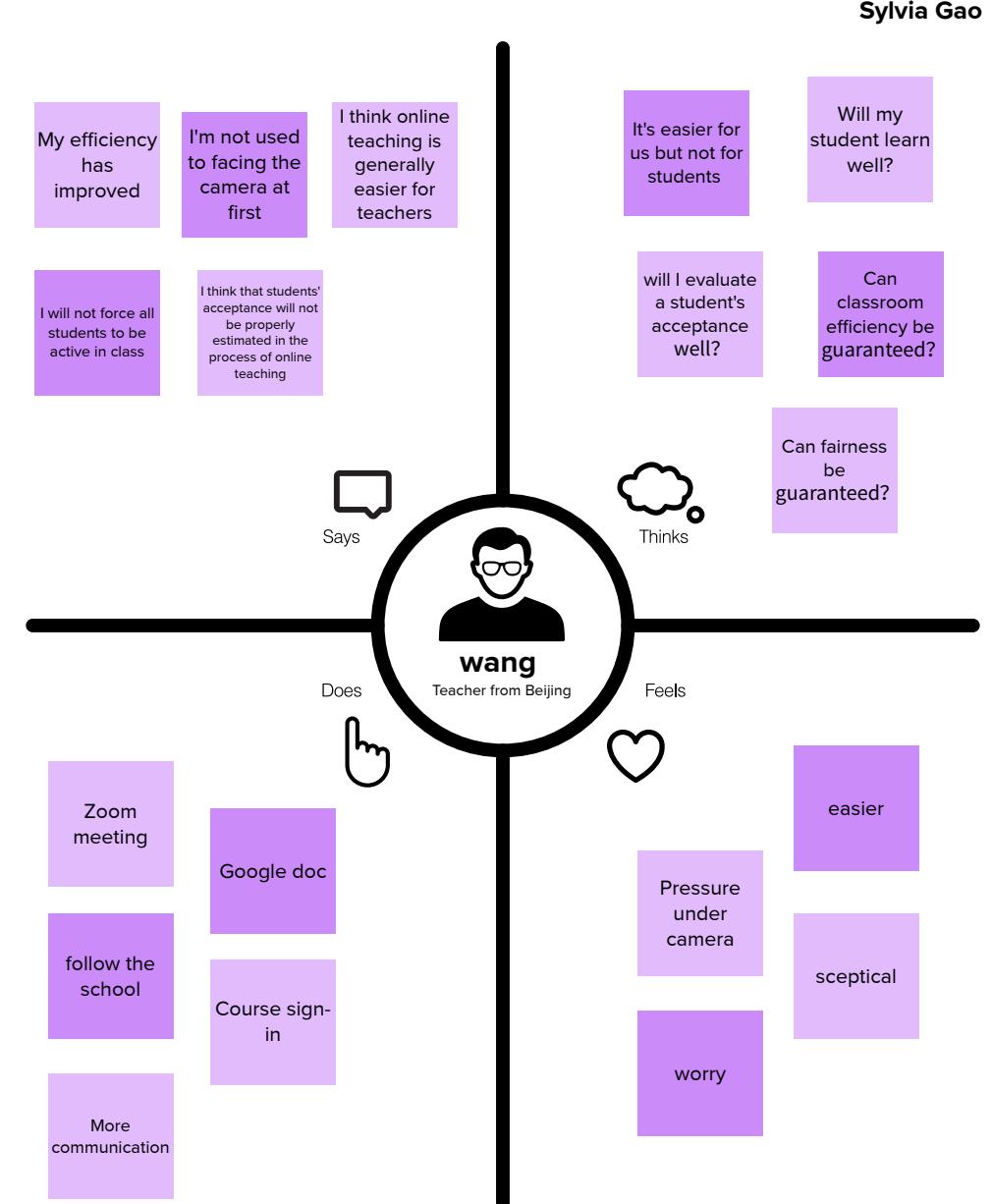




Empathy Map 1

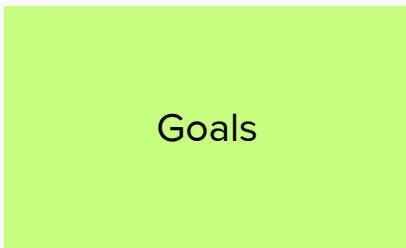


Empathy Map 2



Part A: Empathy Map

Shared goals / needs / tools / motivations



Part C: Needs Statements

Needs Statements

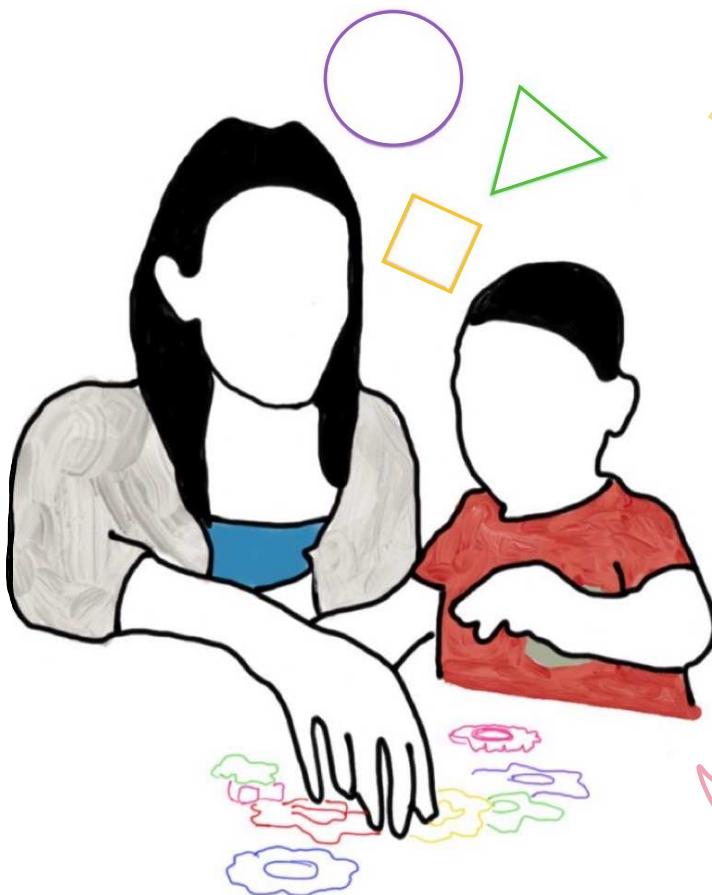
Dedicated preschool teacher needs a way to keep their young students engaged during online sessions because they want to make sure that students are learning to the best of their ability.

Dedicated preschool teacher needs a way to make school feel as exciting as in-person because young students should feel more fulfilled and connected to their teachers and peers.

Dedicated preschool teacher needs a way to make sure that their young students are participating in class because students need to stay fulfilled, motivated, and accountable, reinforcing their ability to teach more effectively.

Dedicated DARCIE

The Pre-school Teacher



Sheltering-in-place as a teacher is difficult because the reason people want to be at school is for what happens in between classes, the "hi" periods in passing; since all that was eliminated, all that is left is the learning time, which is ultimately unfulfilling for the teachers and for the students

Online classes are really unaccustomed at first because of the lack of traditional face-to-face communication. I have to gradually force myself to be more natural when talking with the camera. This may be a bad thing, because classroom efficiency, that is, the degree to which students accept classroom content, is gradually ignored.

The disadvantage of online classrooms is that I can't get timely and real classroom feedback in physics class face to face.

Goals

- ▶ make students **feel normal** and **help** their **well-being** while also **teaching them good material** so that they can be ready for **in-person instruction**
- ▶ **Feel connected** to students
- ▶ Make sure that **students are content** and that their **mental wellbeing** is **taken into consideration**
- ▶ Keep students **engaged** so that they find learning **enjoyable**, albeit remotely
- ▶ Make sure students are **advancing** in terms of their **education**

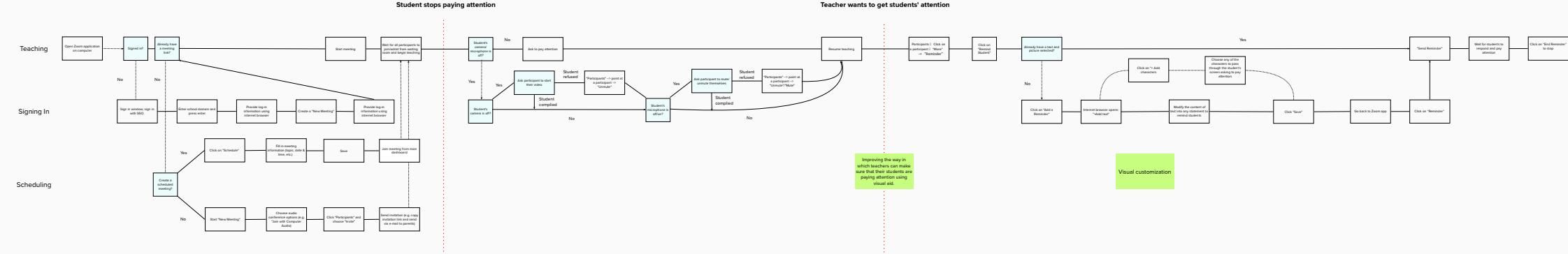
Typical Tasks

- ▶ **planning lessons** and activities for the day
- ▶ **hosting whole-class sessions**
- ▶ **coordinating group-work sessions** (reading, writing, math)
- ▶ **meetings with parents**
- ▶ **staff meetings**
- ▶ **grading homework & assignments**
- ▶ **Sending updates** and **announcements** to parents and students

Project 2 Assignment 4: User Flow - FUTURE (Group 8)

Goal: keep young students engaged

Task: setting up a lesson and teaching over Zoom



**Project 2 Assignment 4: User Flow
- FUTURE (Group 8)**

Persona: The preschool teacher

Product: Zoom

Goal: keep young students engaged

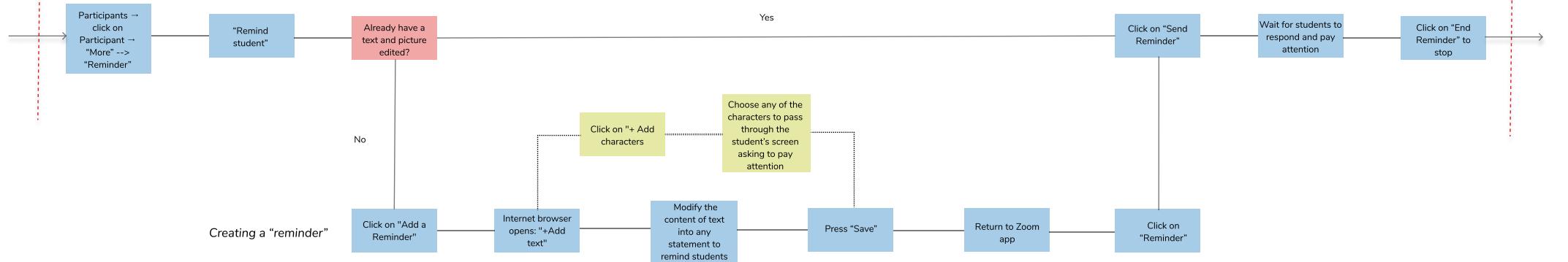
Task: setting up a lesson and teaching over Zoom

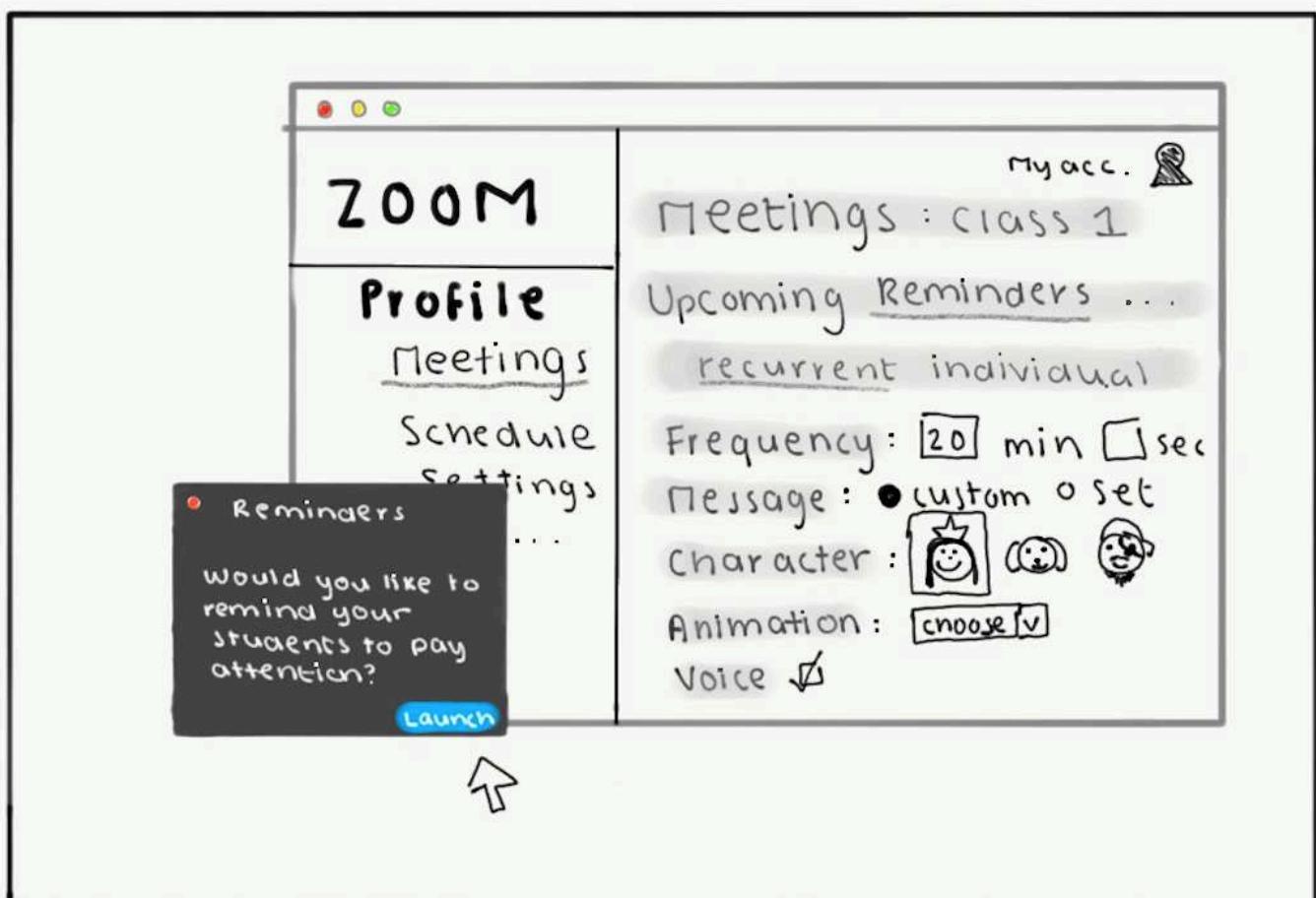
Feature: fun, visual pop-ups that remind students to pay attention

Reminders are customizable characters/visual pop-ups that help teachers with keeping their students engaged. For example, when students become unresponsive, teachers can create visual reminders to let their young students know that they need to pay attention. This replaces features such as polls/reactions that are unsuitable for younger children and eliminates the need for teachers to interrupt their teaching in order to remind children to pay attention.

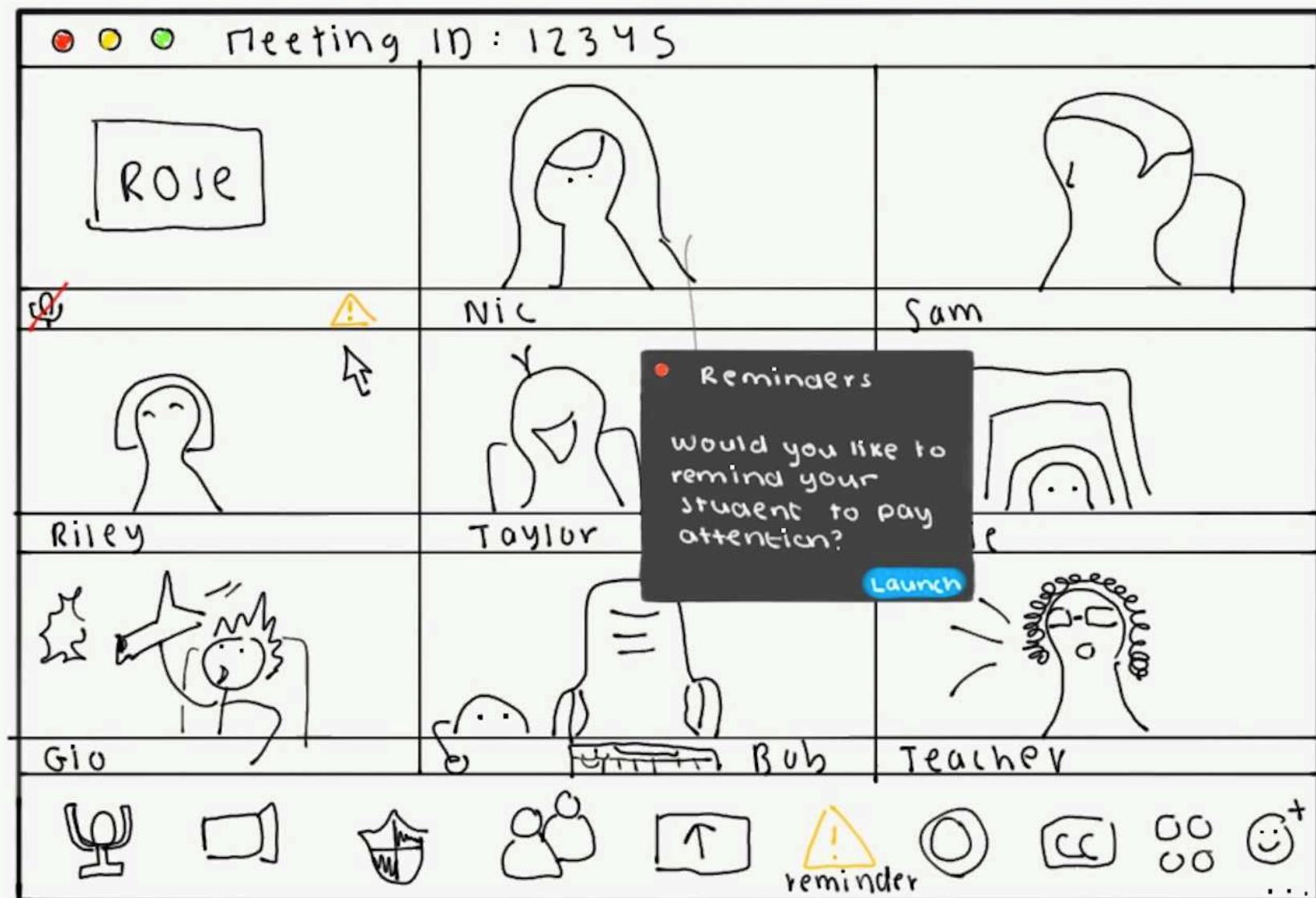
Teacher wants to get students' attention

Student starts paying attention again





Wireframe Sketch #1



Wireframe Sketch #2

ZOOM

Reminder Presets

My acc.

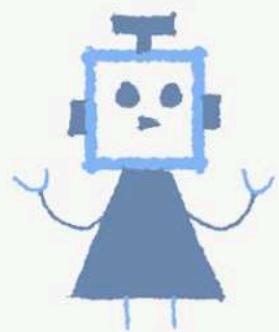
children



HOOK



Froggy



Sky the Robot



Wireframe Sketch #3

LAYOUT 1.

The participants
still shows
there



An cute
figure been
choose by
the teacher
to call the
Students
pay attention

Check "ok"
if the
Students
noticed



This shows the screen your are viewing now



LAYOUT 2.



LAYOUT 3. Teacher's view

The teacher
could remove
the Reminder
Since the
Students pay
attention to
Class again

The mark
of "Reminder"
will Shows
there after
the teacher
put Reminder
to a Student

The system will
notice the teacher
if the student
Saw the
reminder and
check on
"noticed"



Sylvia already check on "noticed"

Speaker view

...

Chat

Rename

Make Host

Remove Reminder

Make Host

Ask to start video

Unmute Stop video

Participants

Polls

Reminder

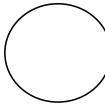
Share Screen

Invite

Record

More

The icon of Reminder



Profile

Meetings

Meetings

[Upcoming](#) [Previous](#)[Personal Room](#)[Meeting Templates](#)[Details](#)[Poll](#)[Reminders](#)

Title

Meeting

[+Add Reminder](#)

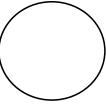
▼ Reminder 1

Morning class

[Edit](#)[Delete](#)Recurrent: Frequency: min secMessage: custom set

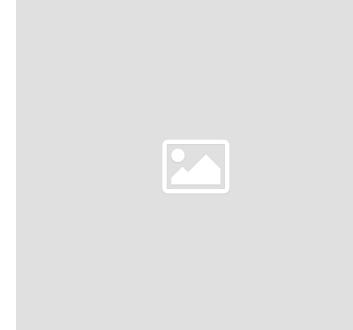
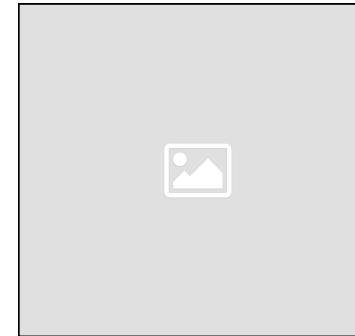
Character: > ...

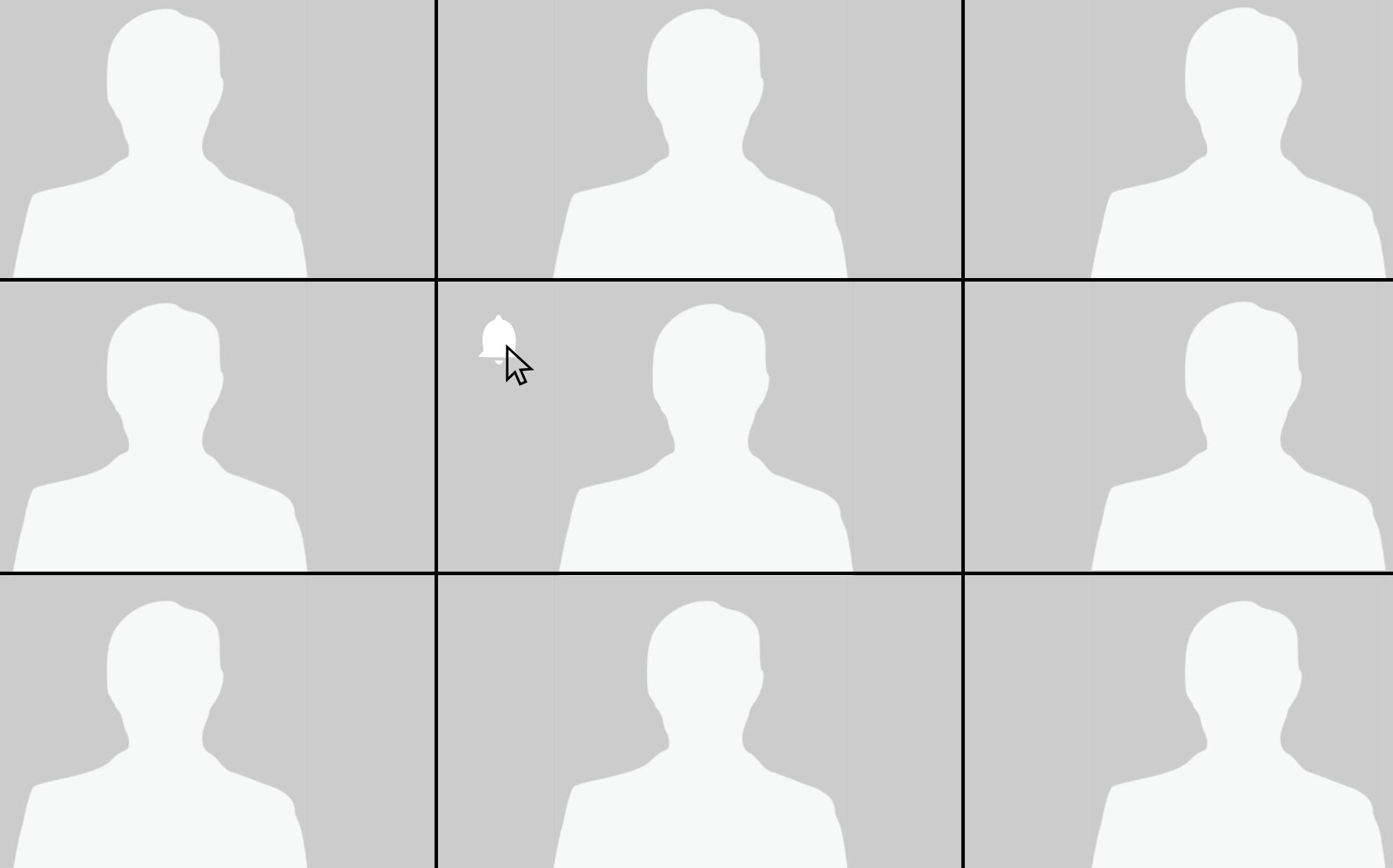
Animation: Voice: [Save](#)

**Profile****Meetings****Reminders****Character****Settings****Account Profile**

Reminders

Character Selection

**Character 1****Character 2****Character 3****Save**



Unmute

Stop Video

Security

Participants 1 ^

Chat

Share Screen

Polling

Reminder

Record

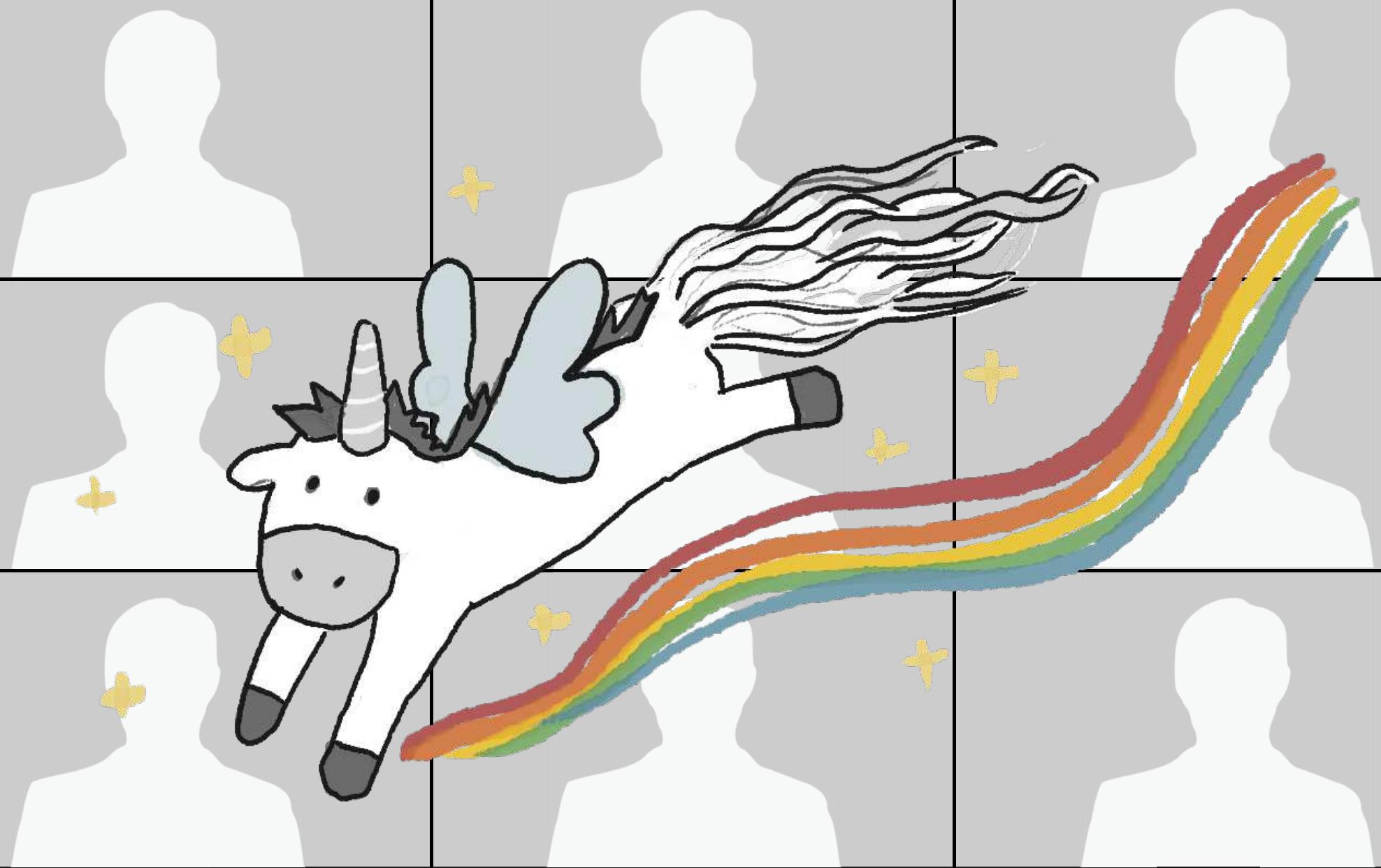
Live Transcript

Breakout Rooms

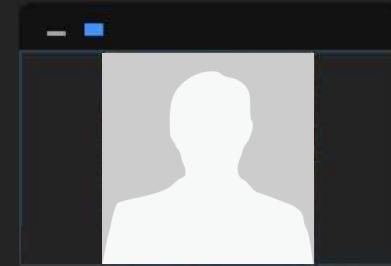
Reactions

More

End



Reminder Message



Unmute

Stop Video

Participants
2

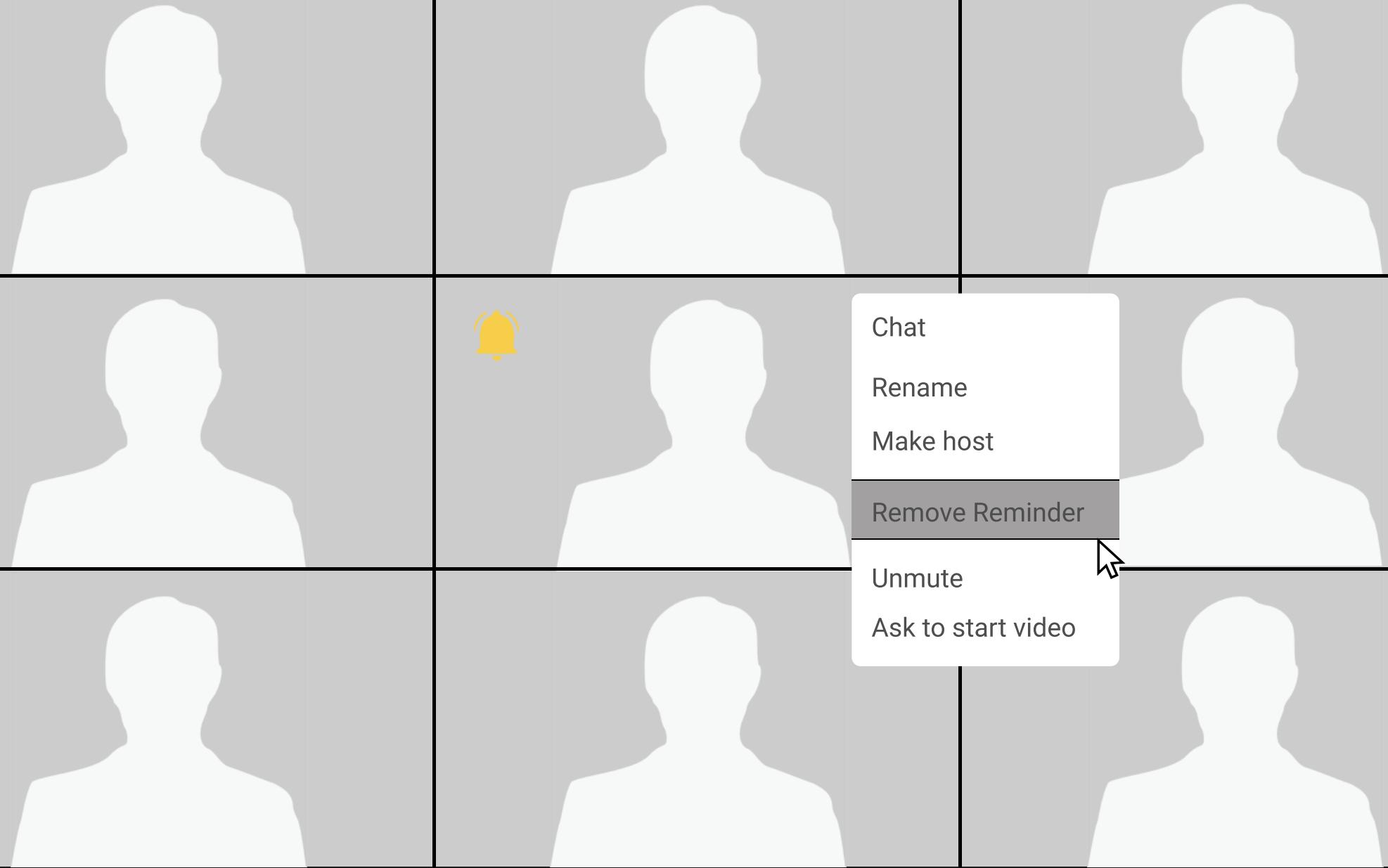
Chat

Share Screen

Record

Reactions

Leave



DES INV 25

Project 2 Assignment 8: Usability test script

Group 8

Introduction

Hello! Thank you for accepting our invitation to this research study. Today, I would like to talk to you so that you can help us improve a feature that we are building for Zoom, a video telephony software. I will show you a prototype, which consists of a couple drafts of a potential user interface and ask you some questions about it.

Please keep in mind that we are not testing your knowledge, and there are no wrong answers. I am here to learn from you.

Do I have permission to record this session? It will not be shared publicly, only with the internal team working on this project.

Thank you. Now I will show you the prototype. It is in its very early stages so not all of the links work; if you click on something and nothing happens, just let me know what you would expect to happen.

While you are looking at the prototype, I will ask you some questions and give you some tasks. I would like you to think out loud while you are doing the tasks – just tell me what you are thinking, what you are expecting, and if anything is confusing, please do not hesitate to ask a question.

Please be frank – nothing you say will be taken personally, and it is important to get your honest feedback to help us improve the product.

Here is some more background that is pertinent to the tasks that you will be asked to carry out. As a teacher teaching young children through Zoom, you find it frustrating that your students are not paying attention during your online class. Zoom Reminders are used in a way to make sure that participants are able to pay attention through animated characters and customizable messages that show up on the participant's screen at the host's command.

Tasks

First Task

Prior to your lesson, you're trying to edit a reminder that you have already created so that you can launch it during your class if your students happen to stop paying attention. Please, show me how you would go about editing said reminder on Zoom once you're already logged in your account.

For this specific task, a lot of the information has been pre-filled and all I ask of you is to change the character that pops-up in the reminder to “Character 1”.

As a reference, you are already logged in and you find yourself in your scheduled Zoom meeting.

Second Task

Great. Now, confirm that this looks alright to you by visualizing what the reminder will look like if it were to be potentially sent to a participant.

The second task will consist of launching this edited reminder to one single participant back in the Zoom App. As a reminder, you are currently still looking at the web browser.

Third Task

You've been successful! It looks like the participant has seen the message and the reminder that you sent them.

As your final task, how would you go about disabling the reminder?

Tips (researcher's use only)

- Remind participant to talk out loud while completing the given tasks; ask what they think
- Give reassurance: “Good”, “Great feedback”, etc.
- Neutral: do not nod, do not frown
- Try not to lead the participant
- Verify assumptions and ask participants to explain why they completed the task in the way they did: “What were you expecting to happen?”, “I noticed you did X, why?”

Project 2 Assignment 9: Usability test results (Group 8)

Figma Prototype link: <https://www.figma.com/proto/X0T3y61OjU707nqubliE1l/Project-2-Assignment-8-Prototype-in-Figma-GROUP-8?node-id=0%3A1>

Sylvia's usability test results

Participant: Springs Lau

Notes:

"I feel like I can basically understand the purpose of the added features"	"When selecting the character, I don't know if I have to click the word "character". There is no feedback when I click on the picture."	The participant won't click the "character" or "..." in the personal room - reminder page because they don't seem clickable
The things surprised me is that the participant complete the task very fast (faster than I thought he might complete)	"Why I can't click the arrow behind character to expand?"	

Problems:

Some buttons seem to be unclickable.	If I create multiple reminder characters at the same time, how can I operate the reminder that assigns different characters to different students?"	Can't set reminder of different character for different students at the same time
--------------------------------------	---	---

Milan's usability test results

Participant: Samira Belato (pre-school teacher)

The participant completed each task quite quickly, with a few delays here and there.	"I acknowledge the problem that you are addressing and I can see what you're trying to do here"	"Overall, I had a pleasant experience with the prototype, although I was confused at times. For example, the preview feature was confusing to me"
Participant asked me to repeat task as she was completing the tasks. Surprising to hear as I found the tasks to be simple. Perhaps the interface was overwhelming to the user.	Interface seemed familiar with the one she uses for Zoom, which made completing tasks easier.	Familiar visual treatment of the new Zoom feature has helped the user to complete the task.

Prior to going to character selection, clicking on the dots ("...") was not intuitive for the user as the button was badly placed and too small to be seen. Instead, the user expected to double click on character frames to the character. This was a moment where the research participant got stuck and it took them a long time to advance with the given task and got quite frustrated as to where they should click in order to move forward.

Some features could be more integrated with one another rather than being on a separate screen. For example, the character selection could be on one screen rather than on a separate one. This goes back to the previous problem, whereby the participant was not able to access the character selection screen as they could not see the "..." button.

When trying to preview the reminder (Task #2), the participant could not find the "Preview" button and started clicking on unclickable areas of the interface. Perhaps the task was not clear enough, but this could be because the "preview" button was small and quite unnoticeable.

At points when the participant got stuck, they would try clicking on anything they could. This has led me to conclude that when tasks aren't intuitive, users can become frustrated resulting in a bad user experience.

Addressing our problems:

1. Problem: Confusion when selecting the character and redundant features.
Solution: Replace "..." button with something more noticeable and create some sort of feedback so the user knows they selected the character they want. Remove redundant features such as "previewing" the reminder.

2. Problem: Can't set reminder of different character for different students at the same time.
Solution: Adjust so that one universal reminder can be sent to the whole class or to an individual participant. Implement some customizability.

3. Problem: Got confused at times because the user could not find the button on the screen. Solution: make buttons more intuitive and visible and integrate some features with one another (e.g. multiple steps on one screen) to create fluidity between features.

Final Visual Comps

Zoom Meeting

Participants (9)

Milan Filo (Host, me)

Bea McGee

Malikah Connor

Eren Houghton

Sylvia Gao

Ahmet Correa

Carol Wilkes

Eren Houghton

Zane Allen

Carol Wilkes

Zane Allen

Mackenzie Guerra

Invite

Mute All

Remind All

More

Unmute

Stop Video

Security

Participants

Chat

Share Screen

Polling

Reminder

Record

Live Transcript

Breakout Rooms

Reactions

More

End

Milan Filo (Host, me)

Eren Houghton

Carol Wilkes

Reminder

Type: Timed Clickable

Timer: sec

Message: Hi! Please pay attention to our class!

Character: Sound

Animation: Fade in

Save

Malikah Connor

Ahmet Correa

Zane Allen

Mackenzie Guerra

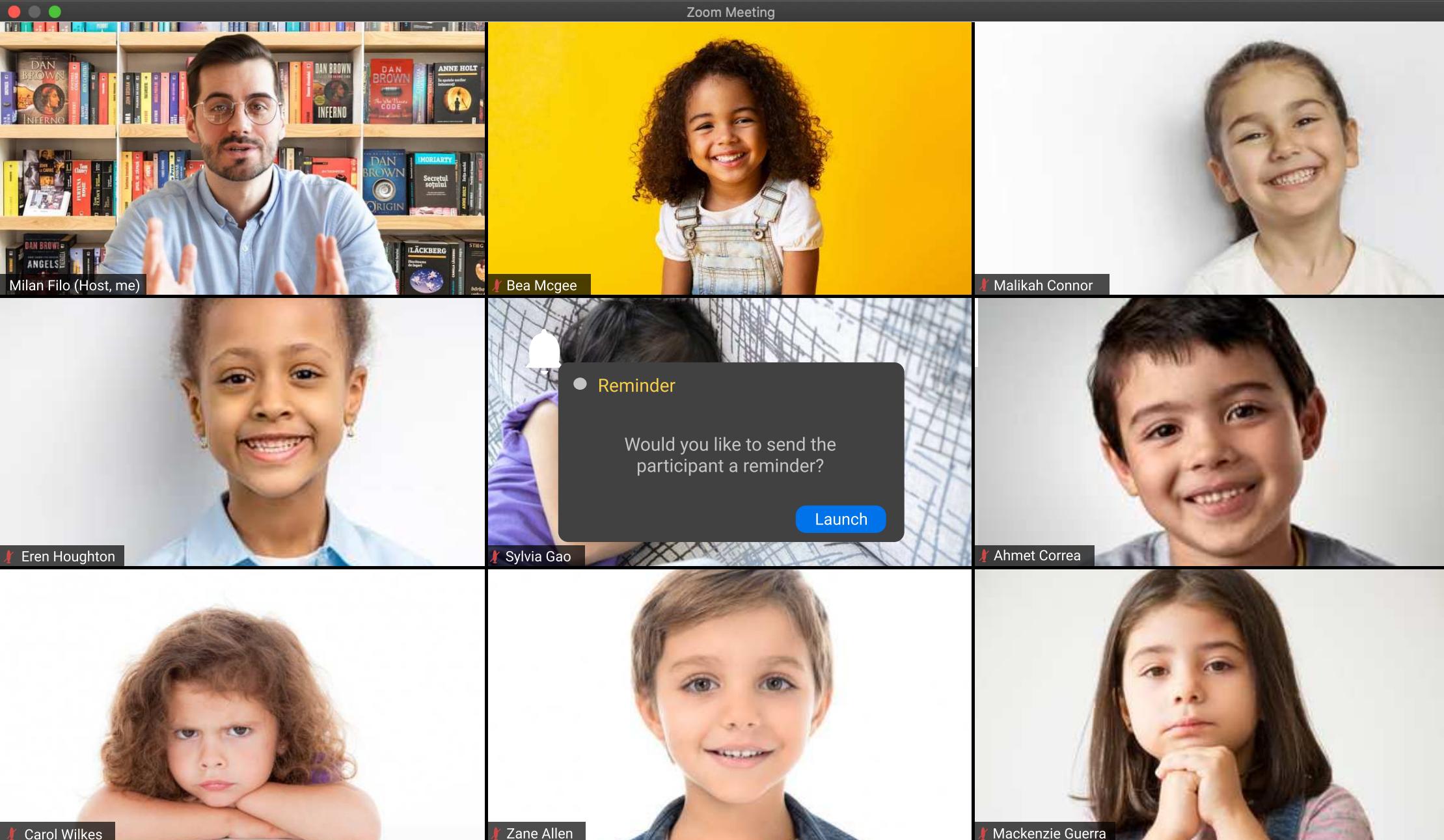
Unmute Stop Video Security Participants Chat Share Screen Polling Reminder Record Live Transcript Breakout Rooms Reactions More End

Participants (9)

	Milan Filo (Host, me)	<input type="button" value="Mute"/>	<input type="button" value="Video"/>	
	Sylvia Gao	<input checked="" type="checkbox"/>	<input type="button" value="Video"/>	<input type="button" value="Bell"/>
	Bea McGee	<input checked="" type="checkbox"/>	<input type="button" value="Video"/>	<input type="button" value="Bell"/>
	Malikah Connor	<input checked="" type="checkbox"/>	<input type="button" value="Video"/>	<input type="button" value="Bell"/>
	Eren Houghton	<input checked="" type="checkbox"/>	<input type="button" value="Video"/>	<input type="button" value="Bell"/>
	Sylvia Gao	<input checked="" type="checkbox"/>	<input type="button" value="Video"/>	<input type="button" value="Bell"/>
	Ahmet Correa	<input checked="" type="checkbox"/>	<input type="button" value="Video"/>	<input type="button" value="Bell"/>
	Karol Wilkes	<input checked="" type="checkbox"/>	<input type="button" value="Video"/>	<input type="button" value="Bell"/>
	Eren Houghton	<input checked="" type="checkbox"/>	<input type="button" value="Video"/>	<input type="button" value="Bell"/>
	Zane Allen	<input checked="" type="checkbox"/>	<input type="button" value="Video"/>	<input type="button" value="Bell"/>
	Mackenzie Guerra	<input checked="" type="checkbox"/>	<input type="button" value="Video"/>	<input type="button" value="Bell"/>

Invite Mute All Remind All More

Unmute Stop Video Security Participants Chat Share Screen Polling Reminder Record Live Transcript Breakout Rooms Reactions More End





Zoom Meeting



Participants (9)



Milan Filo (Host, me)



Sylvia Gao



Bea McGee



Malikah Connor



Ahmet Correa



Carol Wilkes



Eren Houghton



Zane Allen



Mackenzie Guerra



Invite

Mute All

Remind All

More

Unmute

Stop Video

Security

Participants

Chat

Share Screen

Polling

Reminder

Record

Live Transcript

Breakout Rooms

Reactions

More

End

Reminder Message: Hi! Please pay attention to our class!



Sylvia Gao

Unmute

Stop Video

Participants
1

Chat

Share Screen

Polling

Reminders

Record

Live Transcript

Breakout Rooms

Reaction

Leave

Reminder Message: Hi! Please pay attention to our class! ✓



Sylvia Gao

Unmute

Stop Video

Participants 1

Chat

Share Screen

Polling

Reminders

Record

Live Transcript

Breakout Rooms

Reaction

Leave

Time remains: 20 sec



Sylvia Gao

Unmute

Stop Video

Participants
1 ^

Chat

Share Screen
^

Polling

Reminders

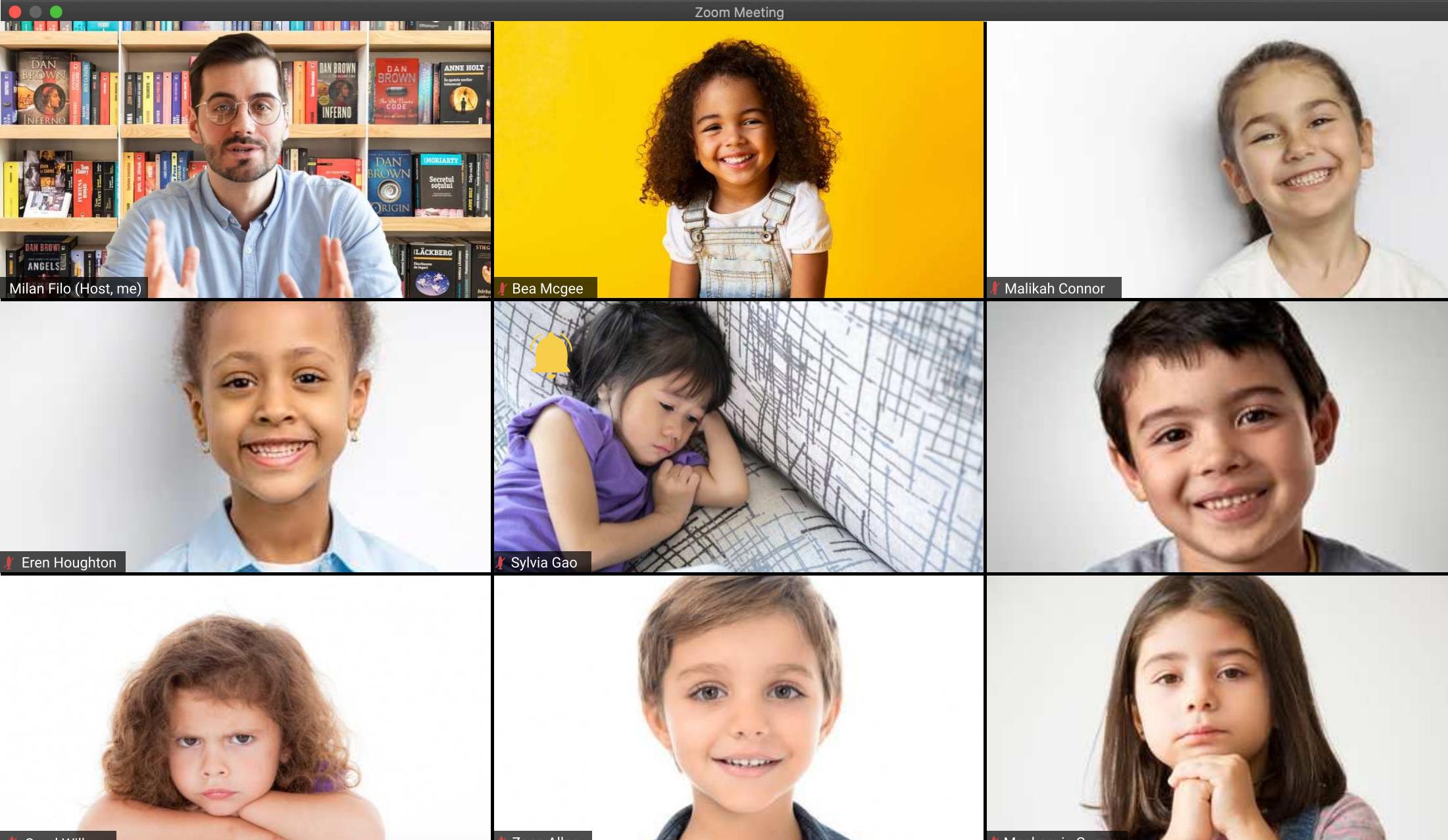
Record

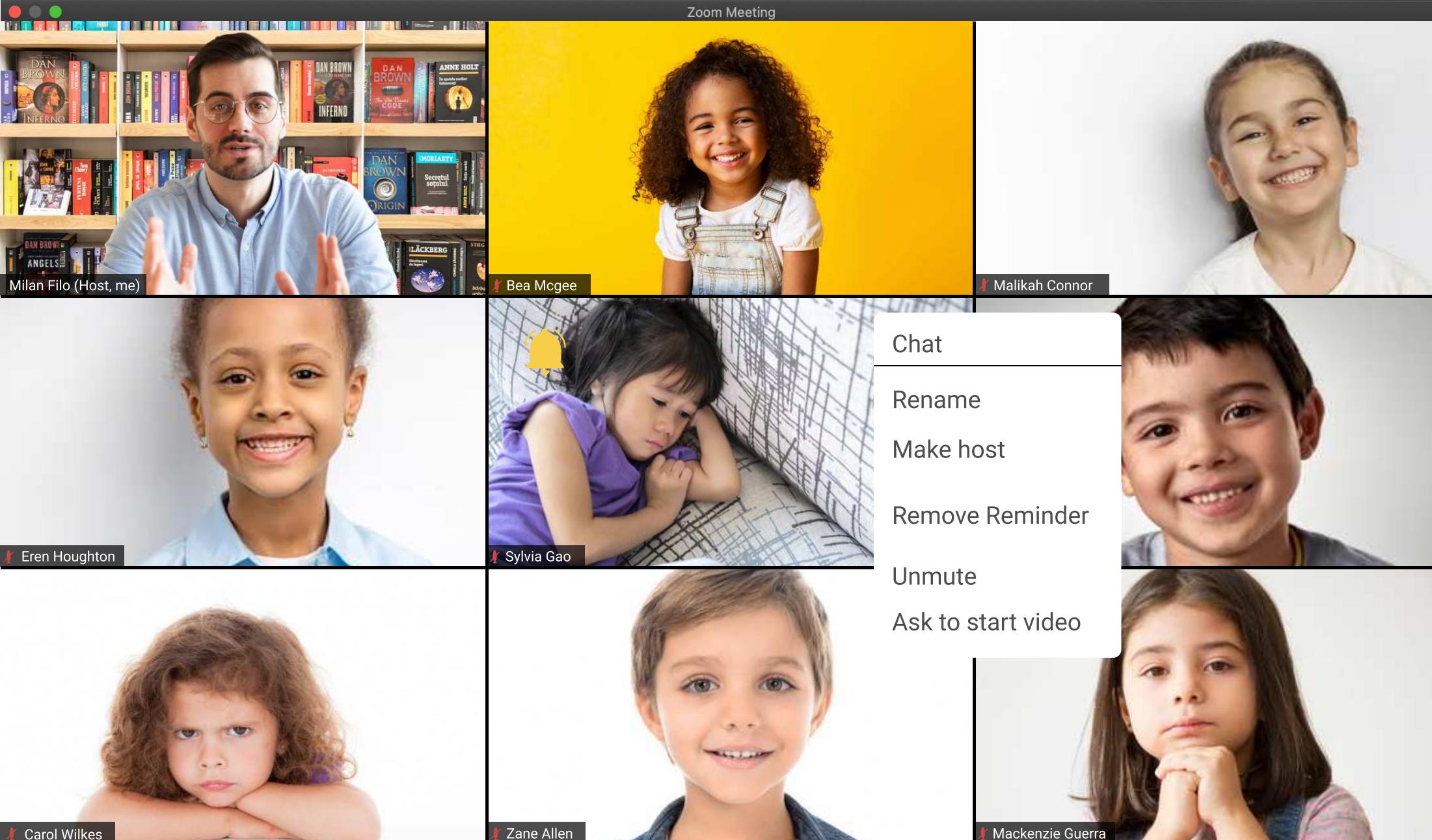
Live Transcript
cc

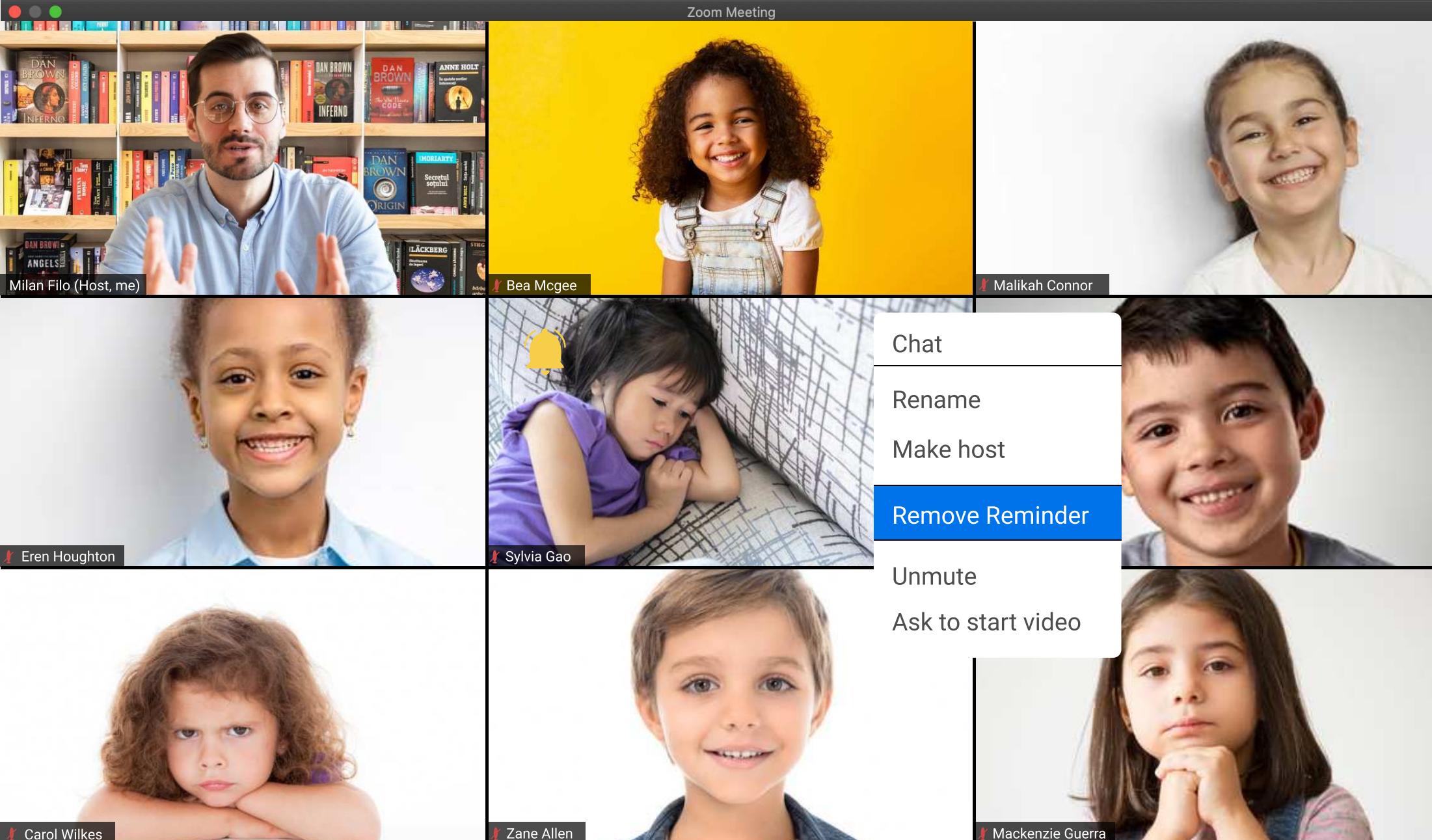
Breakout Rooms

Reaction

Leave







Participants (9)

Milan Filo (Host, me)

Sylvia Gao

Bea McGee

Malikah Connor

Ahmet Correa

Karol Wilkes

Eren Houghton

Zane Allen

Mackenzie Guerra

Invite

Mute All

Remind All

More

Unmute

Stop Video

Security

Participants

Chat

Share Screen

Polling

Reminder

Record

Live Transcript

Breakout Rooms

Reactions

More

End

Reminder Message: Hi! Please pay attention to our class!



Milan Filo (Host, me)

Bea McGee

MaliKah Connor

Eren Houghton

Sylvia Gao

Ahmet Correa

Carol Wilkes

Zane Allen

Mackenzie Guerra

Reminders

for Zoom 

Group 8: Milan Filo, Sylvia Gao

Design PROCESS

01

Discovery

Insight into the problem

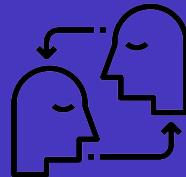
Discovery

Interview



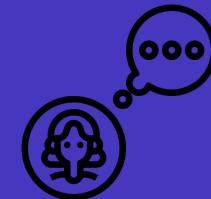
Determining the audience

Empathy map



Understanding all parties: young students, teachers, and parents

Needs Statements



Reflecting the needs of the teacher

Needs statements

1 Dedicated preschool teacher needs a way to keep their young students engaged during online sessions because they want to make sure that students are learning to the best of their ability.

2 Dedicated preschool teacher needs a way to make school feel as exciting as in-person because young students should feel more fulfilled and connected to their teachers and peers.

3 Dedicated preschool teacher needs a way to make sure that their young students are participating in class because students need to stay fulfilled, motivated, and accountable, reinforcing their ability to teach more effectively.

02

Defining

the area of focus

Defining

Persona: The preschool teacher

Product: Zoom

Goal: keep young students engaged

Task: setting up a lesson and teaching over Zoom



HOW?

03

Developing

Potential solutions

Developing

- User flows
- Pain points
- How does Zoom facilitate similar tasks?
- POV?

So what are
Reminders?

Zoom Meeting

The image shows a Zoom meeting interface with a grid of participant video feeds. A central modal dialog is open, titled "Reminder".

Reminder

Type: Clickable Timed

Timer: sec

Message: Hi! Please pay attention to our class!

Character: Sound

Animation: Fade in

Participants visible in the grid:

- Milan Filo (Host, me)
- Eren Houghton
- Carol Wilkes
- Zane Allen
- Malikah Connor
- Ahmet Correa
- Mackenzie Guerra

Bottom navigation bar:

- Unmute
- Stop Video
- Security
- Participants 1
- Chat
- Share Screen
- Polling
- Reminder
- Record
- Live Transcript
- Breakout Rooms
- Reactions
- More
- End

Zoom Meeting

The image shows a Zoom meeting interface with a 3x3 grid of participant thumbnails. The participants are:

- Milan Filo (Host, me)
- Bea McGee
- Malikah Connor
- Eren Houghton
- Sylvia Gao
- Ahmet Correa
- Carol Wilkes
- Zane Allen
- Mackenzie Guerra

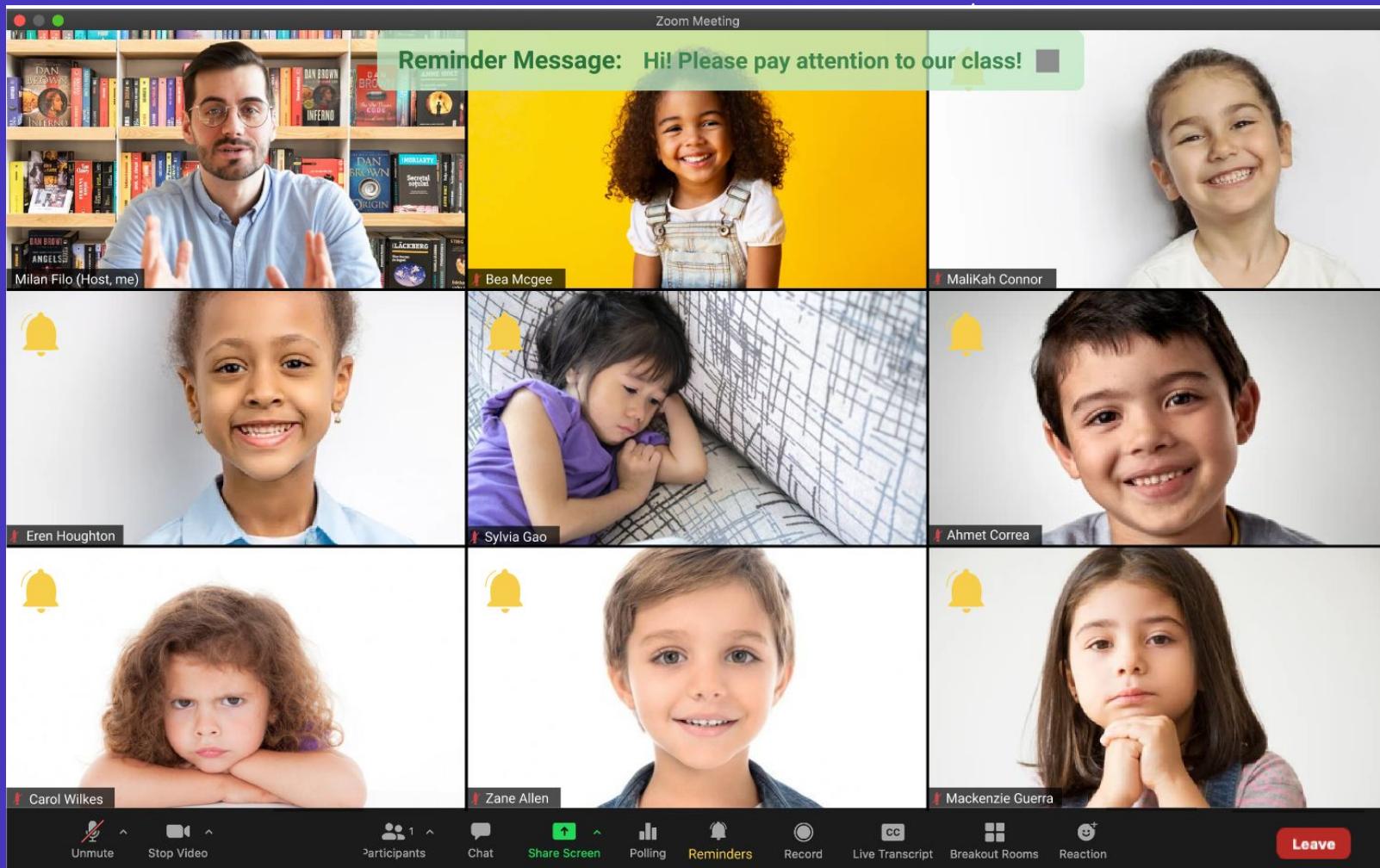
On the right side, there is a list of participants with their names, profile icons, and control buttons for Unmute, Stop Video, and Mute All.

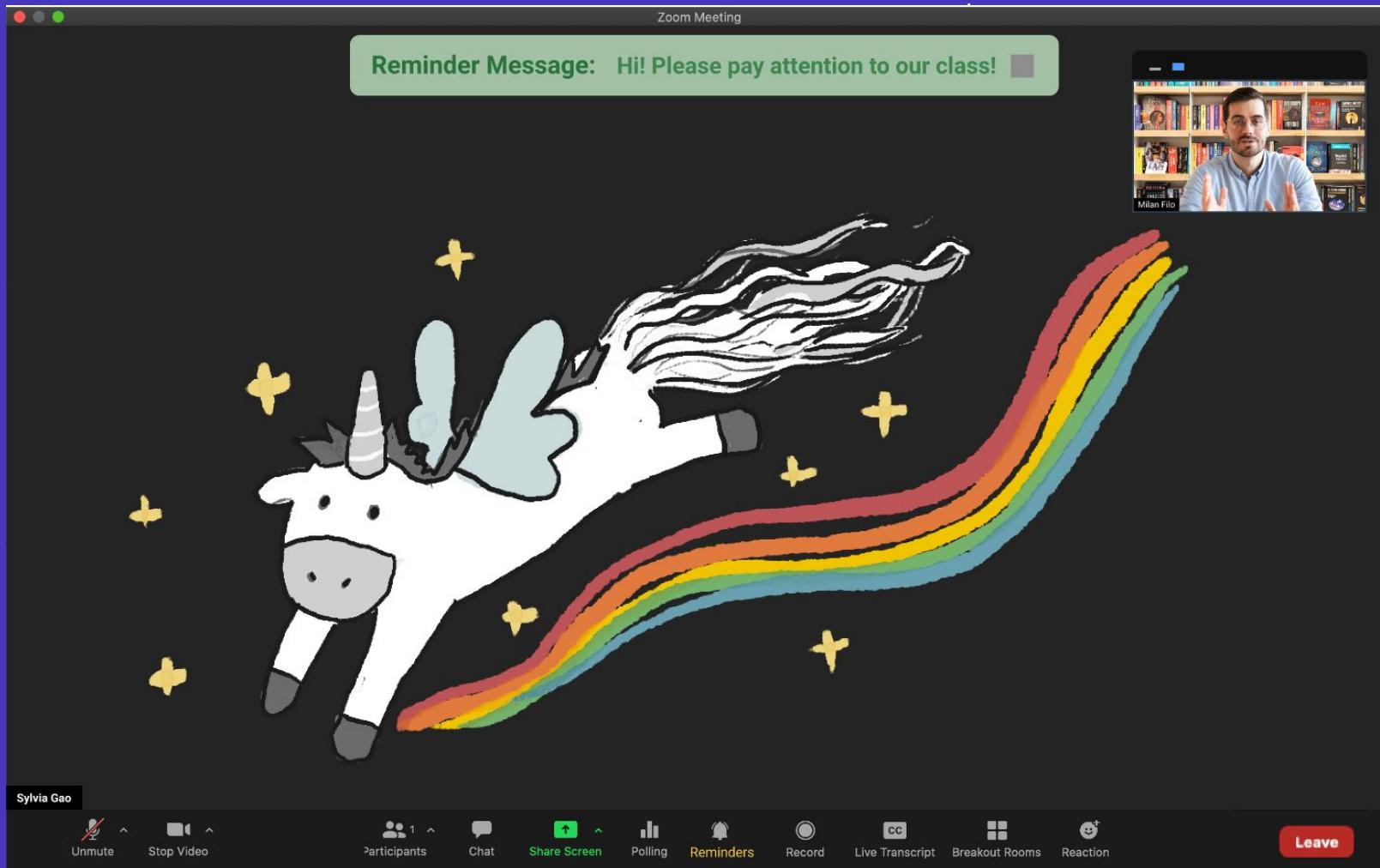
Participants (9)

- Milan Filo (Host, me)
- Sylvia Gao
- Bea McGee
- Malikah Connor
- Ahmet Correa
- Karol Wilkes
- Eren Houghton
- Zane Allen
- Mackenzie Guerra

Bottom navigation bar:

- Unmute
- Stop Video
- Security
- Participants
- Chat
- Share Screen
- Polling
- Reminder
- Record
- Live Transcript
- Breakout Rooms
- Reactions
- More
- End





04

Delivering
solutions that work

Problems

- Confusion
- Unnecessary features
- Too much customizability
- Difficulty in terms of discoverability
- Buttons are not noticeable/placed badly

Finalized PERSONA



Persona

The Preschool Teacher

Dedicated DARCIE

The Pre-school Teacher



Sheltering-in-place as a teacher is difficult because the reason people want to be at school is for what happens in between classes, the "hi" periods in passing; since all that was eliminated, all that is left is the learning time, which is ultimately unfulfilling for the teachers and for the students

Online classes are really unaccustomed at first because of the lack of traditional face-to-face communication. I have to gradually force myself to be more natural when talking with the camera. This may be a bad thing, because classroom efficiency, that is, the degree to which students accept classroom content, is gradually ignored.

The disadvantage of online classrooms is that I can't get timely and real classroom feedback in physics class face to face.

Goals

- ▶ make students feel normal and help their well-being while also teaching them good material so that they can be ready for in-person instruction
- ▶ Feel connected to students
- ▶ Make sure that students are content and that their mental wellbeing is taken into consideration
- ▶ Keep students engaged so that they find learning enjoyable, albeit remotely
- ▶ Make sure students are advancing in terms of their education

Typical Tasks

- ▶ planning lessons and activities for the day
- ▶ hosting whole-class sessions
- ▶ coordinating group-work sessions (reading, writing, math)
- ▶ meetings with parents
- ▶ staff meetings
- ▶ grading homework & assignments
- ▶ Sending updates and announcements to parents and students

Demo